

**BB14 Series
Intercept® Back Box**

**Installation/
Operation Manual**

C454M-C (1/98)

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REVISION HISTORY

| Manual # | Date | Comments |
|-----------------|-------------|--|
| C454M | — | Original version. |
| C454M-A | 6/95 | Revised to incorporate B.O.M. quantity changes as per ECO# 94-445. Added 4-position terminal block information as per ECO# 94-042. Incorporated new "Front" labeling to B.O.M. as per ECO# 94-192. Updated manual to new style standards. Added manual revision history. |
| | 6/23/95 | Addendum. Incorporated new fuse and fuse holder into wiring diagrams and exploded view diagram as per ECO# 95-063. |
| | 2/27/96 | Addendum. Section 5.0 Mechanical Parts List revised. |
| C454M-B | 4/96 | Rev. B. Added Section 3.4.2.1 and Figure 16 per ECO# 96-061. Changed heater specifications. |
| C454M-C | 1/98 | Changed manual to new format and manual pagination. Reduced number of models. Revised installation instructions. Updated exploded assembly diagrams and parts lists. |

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1.0 GENERAL

1.1 IMPORTANT SAFEGUARDS AND WARNINGS

Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by Qualified Service Personnel and conform to all Local codes.
2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
3. Only use replacement parts recommended by Pelco.
4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.
5. The installation method and materials should be capable of supporting four (4) times the weight of the enclosure, pan/tilt, camera and lens combination.

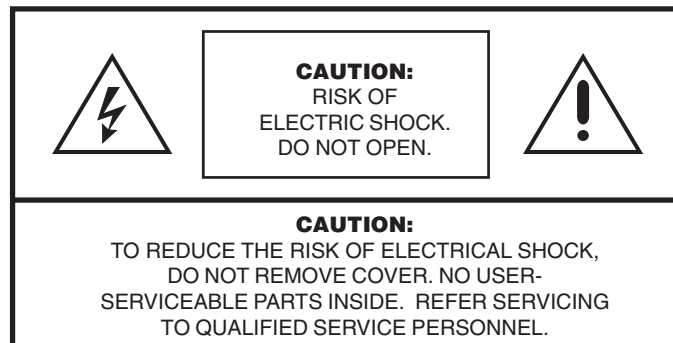
The product and/or manual may bear the following marks:



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



**Please thoroughly familiarize yourself with the information
in this manual prior to installation and operation.**

1.2 UNPACKING INSTRUCTIONS

Unpack and inspect all parts carefully.

Be sure to save the shipping carton and any inserts. They are the safest material in which to make future shipments.

If an item appears to have been damaged in shipment, replace it properly in its carton and contact the factory at 1-800-289-9100 or 1-559-292-1981 for a replacement. (International customers fax 1-559-348-1120 for authorization and instructions.)

If an item needs to be returned to the factory for repair, consult the WARRANTY AND RETURN section of this manual for instructions.

The following items are supplied:

Suspended Ceiling Models

- 1 Back box with face plate, trim ring, and dome
- 1 Parts bag
- 2 Eye bolts with nuts, flat washers and split lock washers
- 4 T-rail clips
- 1 Installation/Operation Manual (C454M-C)

Hard Ceiling Models

- 1 Back box with trim ring and dome
- 1 Installation/Operation Manual (C454M-C)

Pendant Models

- 1 Bezel with dome
- 1 Pendant cap
- 1 Back box
- 1 Back box gasket
- 1 Parts bag with two O-rings (outdoor models only)
- 1 Installation/Operation Manual (C454M-C)

1.3 RECOMMENDED TOOLS

Pelco does not supply basic tools needed for the installation process. The following tools are recommended:

- Medium Phillips screwdriver
- Wire cutter
- Wire stripper
- BNC crimp tool
- Coaxial cable stripper
- Hammer and punch (suspended ceiling model only)
- Large Phillips screwdriver (suspended ceiling model only)
- 11 mm wrench (suspended ceiling model only)
- Drill (hard ceiling models only)

2.0 DESCRIPTION

The BB14 Series of back boxes is part of the IDS14 Intercept® Series of domes. The IDS14 Series is an integral system that includes a back box (BB14), dome drive or fixed mount (DD14), and dome receiver/driver (DRD14).

This manual cover the BB14 Series of back boxes. For installation and operation instructions for the dome drive, refer to manual C458M-B; for the fixed mount, refer to C291M-B; and for the dome receiver/driver, refer to C466M-E.

2.1 MODELS

Indoor, Suspended-Grid Ceiling

| | |
|----------|--|
| BB14A100 | Indoor back box for suspended-grid ceiling; smoked dome; hard-wire control. (CE) |
| BB14A101 | Indoor back box for suspended-grid ceiling; clear dome; hard-wire control. (CE) |
| BB14A110 | Indoor back box for suspended-grid ceiling; smoked dome; 120 VAC input. (UL) |
| BB14A111 | Indoor back box for suspended-grid ceiling; clear dome; 120 VAC input. (UL) |
| BB14A120 | Indoor back box for suspended-grid ceiling; smoked dome; 24 VAC input. (CE, UL) |
| BB14A121 | Indoor back box for suspended-grid ceiling; clear dome; 24 VAC input. (UL) |
| BB14A130 | Indoor back box for suspended-grid ceiling; smoked dome; 230 VAC input. (CE) |
| BB14A131 | Indoor back box for suspended-grid ceiling; clear dome; 230 VAC input. (CE) |

Indoor, Hard Ceiling

| | |
|----------|--|
| BB14C100 | Indoor back box for hard ceiling; smoked dome; hard-wire control. (CE, UL) |
| BB14C101 | Indoor back box for hard ceiling; clear dome; hard-wire control. (CE, UL) |
| BB14C110 | Indoor back box for hard ceiling; smoked dome; 120 VAC input. (UL) |
| BB14C111 | Indoor back box for hard ceiling; clear dome; 120 VAC input. (UL) |
| BB14C120 | Indoor back box for hard ceiling; smoked dome; 24 VAC input. (CE, UL) |
| BB14C121 | Indoor back box for hard ceiling; clear dome; 24 VAC input. (CE, UL) |
| BB14C130 | Indoor back box for hard ceiling; smoked dome; 230 VAC input. (CE) |
| BB14C131 | Indoor back box for hard ceiling; clear dome; 230 VAC input. (CE) |

Indoor, Pendant

| | |
|----------|---|
| BB14E100 | Indoor, black, pendant-mount back box; smoked dome; hard-wire control. (CE, UL) |
| BB14E101 | Indoor, black, pendant-mount back box; clear dome; hard-wire control. (CE, UL) |
| BB14E110 | Indoor, black, pendant-mount back box; smoked dome; 120 VAC input. (UL) |
| BB14E111 | Indoor, black, pendant-mount back box; clear dome; 120 VAC input. (UL) |
| BB14E120 | Indoor, black, pendant-mount back box; smoked dome; 24 VAC input. (CE, UL) |
| BB14E121 | Indoor, black, pendant-mount back box; clear dome; 24 VAC input. (CE, UL) |
| BB14E130 | Indoor, black, pendant-mount back box; smoked dome; 230 VAC input. (CE) |
| BB14E131 | Indoor, black, pendant-mount back box; clear dome; 230 VAC input. (CE) |

Outdoor, Pendant

| | |
|------------|---|
| BB14E200 | Outdoor, gray, pendant-mount back box; smoked dome; hard-wire control. Includes 120 VAC heater and blower. (CE) |
| BB14E200-2 | Outdoor, gray, pendant-mount back box; smoked dome; hard-wire control. Includes 24 VAC heater and blower. (CE) |
| BB14E200-3 | Outdoor, gray, pendant-mount back box; smoked dome; hard-wire control. Includes 230 VAC heater and blower. (CE) |
| BB14E201 | Outdoor, gray, pendant-mount back box; clear dome; hard-wire control. Includes 120 VAC heater and blower. (CE) |
| BB14E201-2 | Outdoor, gray, pendant-mount back box; smoked dome; hard-wire control. Includes 24 VAC heater and blower. (CE) |
| BB14E201-3 | Outdoor, gray, pendant-mount back box; smoked dome; hard-wire control. Includes 230 VAC heater and blower. (CE) |
| BB14E210 | Outdoor, gray, pendant-mount back box; smoked dome; 120 VAC input. Includes 120 VAC heater and blower. (UL) |
| BB14E211 | Outdoor, gray, pendant-mount back box; clear dome; 120 VAC input. Includes 120 VAC heater and blower. (UL) |
| BB14E220 | Outdoor, gray, pendant-mount back box; smoked dome; 24 VAC input. Includes 24 VAC heater and blower. (CE, UL) |
| BB14E221 | Outdoor, gray, pendant-mount back box; clear dome; 24 VAC input. Includes 24 VAC heater and blower. (CE, UL) |
| BB14E230 | Outdoor, gray, pendant-mount back box; smoked dome; 230 VAC input. Includes 230 VAC heater and blower. (CE) |
| BB14E231 | Outdoor, gray, pendant-mount back box; clear dome; 230 VAC input. Includes 230 VAC heater and blower. (CE) |

3.0 INSTALLATION

3.1 MOUNTING

NOTE: *If you are going to install a heater/blower kit, it should be done before installing the back box. Refer to Section 3.2.3, HEATER/BLOWER KIT FIELD INSTALLATION.*

The Intercept® Series of domes provide back box configurations for several applications and environments (refer to Figures 12 and 13).

Installation instructions for the applications listed below will appear in the following order:

1. Suspended ceiling mounting
2. Hard ceiling mounting
3. Pendant mounting

3.1.1 Suspended Ceiling Mounting

NOTE: *When installing into a 2' x 4' (.61 m x 1.22 m) ceiling grid, cut the ceiling tile in half and install an additional "T" rail for support.*

To mount the back box into a suspended ceiling grid, perform the following steps:

1. Determine the location for mounting the back box and remove the appropriate ceiling tile.
2. Angle the back box through the grid opening and set the box into the grid.
3. From an opening in a grid adjacent to the back box apply the four (4) clips supplied to the "T" bar to secure the back box to the grid (refer to Figure 1).
4. If additional support is required (such as anchoring with a chain or steel cable to a support beam above the dome enclosure), install one or both of the 1/4-20 eye bolts and washers that are supplied in the parts bag:
 - a. Remove one or two of the 1/4-20 screws in the top of the back box.
 - b. Screw a nut about a half inch onto an eyebolt.
 - c. Slide a split lock washer and flat washer onto the eyebolt.
 - d. Screw the eyebolt into the back box and lock the eyebolt into place by tightening the nut with an 11 mm wrench.
 - e. Repeat steps b-d if you are going to install the second eyebolt.
 - f. Use a chain or cable to fasten the eyebolt(s) to a support structure in the ceiling.

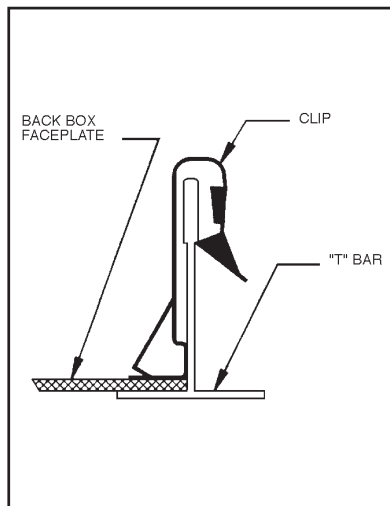


Figure 1. "T-Bar" Clip Installation

Proceed to Section 3.2, WIRING INSTRUCTIONS.

3.1.2 Hard Ceiling Mounting

For installing the back box in a hard ceiling, an optional backup plate is provided for applications where additional reinforcement to the ceiling structure is needed.

To mount the back box directly into a hard ceiling, perform the following steps.

1. Determine the location of the back box. Ideally the back box cutout should be adjacent to any ceiling structure.
2. Cut the opening in the ceiling (16-13/16" in diameter).
3. Insert the back box into the opening. Mark spots to drill holes through the side of the back box at the locations where fasteners need to be located. Remove the back box and drill the holes.
4. Using the appropriate fasteners (not supplied) attach the back box to any adjacent structure through the drilled holes in the box.

Proceed to Section 3.2, WIRING INSTRUCTIONS.

3.1.2.1 Optional Backup Plate Installation

A backup plate assembly is supplied with all back boxes to be installed in hard ceilings, and is for use in applications where additional reinforcement to the ceiling structure is needed. To install the backup plate, do steps 1 through 2 in Section 3.1.2 and then proceed as follows. Refer to Figure 2.

1. Insert the back box into the opening in the ceiling and mark the ceiling with the locations of four of the screw holes in the flange. The holes must be 90° apart.
2. Remove the back box and drill 13/64" screw holes in the ceiling at the marked points.
3. Insert the two (2) pieces of the backup plate through the large hole and position them around the opening. Connect the two halves using the studs provided.
4. Align the nuts in the plate with the four (4) screw holes in the ceiling.
5. Insert the back box into the ceiling, and align the screw holes in the ceiling with the holes in the flange of the back box.
6. Attach the back box to the backup plate with four (4) 6-32 screws provided.
7. Use appropriate fasteners (not supplied) to attach the back box to any adjacent structure through the holes drilled in the side of the back box.

Proceed to Section 3.2, WIRING INSTRUCTIONS.

3.1.3 Pendant Mounting

NOTE: *The length of pipe used may effect noticeable motion on the video display. If this occurs additional support of the pipe by bracing, guy wiring, etc. will be required.*

NOTE: *For outdoor models apply pipe thread sealant to the pipe threads prior to assembly.*

The pendant back box is designed to be suspended from a suitable length of 1-1/2" pipe threaded at both ends. This pipe can be interfaced to the IWM Series or IDM4018 wall mounts or to the MRWA wall adapter mount or MRCA ceiling adapter mount.

To install the pendant type back box, perform the following steps:

1. Select and install the mount of choice according to the instructions provided with the mount. This may be a good time to route any needed wiring through the mount. Refer to Section 3.2, WIRING INSTRUCTIONS.
2. Select the appropriate length of pipe (2-1/2" minimum length) and thread into the mount. Tighten to approximately 30 ft/lb and tighten any locking means that may be provided on the mount.
3. Slide the back box "cap" up the pipe.

On outdoor units first slide one (1) of the two (2) O-rings up the pipe, followed by the "cap" and the second O-ring.

On indoor models while holding the "cap" in place, bring the back box into place and engage the threaded flange on the back box with the pipe. (Be sure to back out the locking screw in the flange prior to this.)

4. Spin the back box onto the pipe. The latches inside the back box may be used as handles to provide a light torque to the box (approximately 20 ft/lb). Tighten the lock screw.
5. Lower the "cap" onto the top of the back box. On outdoor models also lower the external O-ring until it contacts the "cap".

Proceed to Section 3.2, WIRING INSTRUCTIONS.

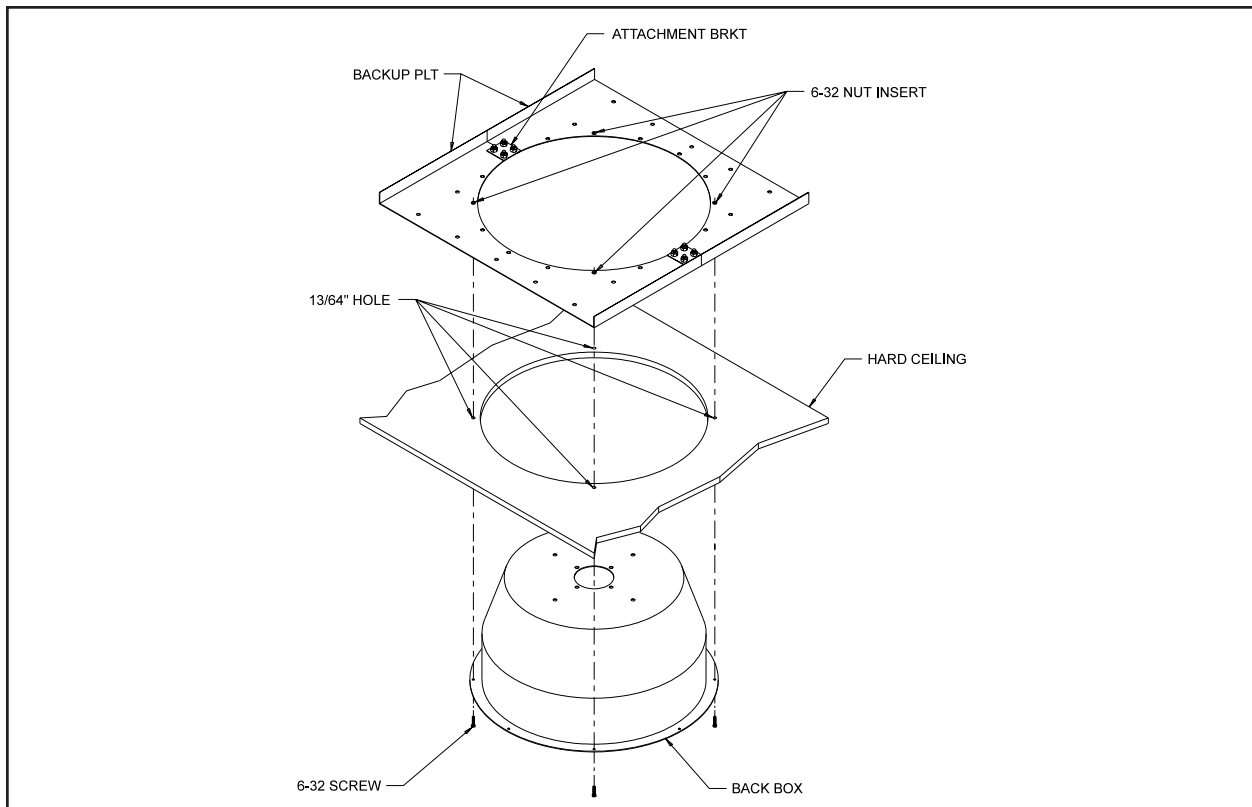


Figure 2. Backup Plate Installation

3.2 WIRING INSTRUCTIONS

How your back box will be wired depends on the type of unit you have:

- Units with an on-board receiver/driver
- Units without an on-board receiver/driver (hard-wire applications)

Hardwire refers to installations using a remote receiver/driver or a true hardwire controller.

Proceed to either Section 3.2.1, On-Board Receiver/Driver, or Section 3.2.2, Hardwire or Remote Receiver/Driver.

3.2.1 On-Board Receiver/Driver

On models for suspended ceilings or hard ceilings, a plate is provided on the top of the back box with 1/2" and 3/4" conduit knockouts.

1. Bring the wiring to the back box.

Video - Refer to Table A for the type of video coaxial cable to use.

Power - If the input power to the dome is 24 VAC, refer to Table B to determine the size of wire to use. For outdoor units, make sure the wiring can supply power for the heaters and fan as well as the receiver/driver. Refer to Section 5.0, SPECIFICATIONS, for power requirements.

Control - If you **are** using a Coaxitron® controller, the control signals to operate the dome drive will be transmitted over the video coax.

If you **are not** using a Coaxitron® controller, bring wires to the back box for two (2) RS-485 control lines (RX+ and RX-).

Refer to Figure 3, 4, or 5 for the following steps.

2. Install the coaxial cable to the BNC connector.
3. Install power to the 10-position terminal block. Make sure the power switch on the side of the back box is off.
4. If you are **not** using Coaxitron® control, connect the control wiring to RXD+ and RXD-.

| From controller | To 4-wire terminal inside back box |
|-----------------|------------------------------------|
| TXD+ | RXD+ |
| TXD- | RXD- |

Proceed to Section 3.3, DOME DRIVE INSTALLATION.

Table A. Video Coaxial Cable Requirements

| Cable Type* | Maximum Distance |
|--|------------------|
| RG59/U | 750 ft (229 m) |
| RG6/U | 1,000 ft (305 m) |
| RG11/U | 1,500 ft (457 m) |
| * Minimum cable requirements: 75 ohms All-copper center conductor All-copper braided shield with 95% braid coverage | |

Table B. 24 VAC Wiring Distances

The following are the recommended maximum distances for 24 VAC applications and are calculated with a 10-percent voltage drop. (10-percent is generally the maximum allowable voltage drop for AC-powered devices.)

EXAMPLE: An enclosure that requires 80 vA and is installed 35 feet (10 m) from the transformer would require a minimum wire gauge of 20 Awg.

NOTE: Distances are calculated in feet; values in parentheses are meters.

| | | Wire Gauge | | | | | |
|-------------------|-----|-------------|--------------|--------------|---------------|---|---------------|
| | | 20 | 18 | 16 | 14 | 12 | 10 |
| Total vA consumed | 10 | 283 (86) | 451 (137) | 716 (218) | 1142 (348) | 1811 (551) | 2880 (877) |
| | 20 | 141 (42) | 225 (68) | 358 (109) | 571 (174) | 905 (275) | 1440 (438) |
| | 30 | 94 (28) | 150 (45) | 238 (72) | 380 (115) | 603 (183) | 960 (292) |
| | 40 | 70 (21) | 112 (34) | 179 (54) | 285 (86) | 452 (137) | 720 (219) |
| | 50 | 56 (17) | 90 (27) | 143 (43) | 228 (69) | 362 (110) | 576 (175) |
| | 60 | 47 (14) | 75 (22) | 119 (36) | 190 (57) | 301 (91) | 480 (146) |
| | 70 | 40 (12) | 64 (19) | 102 (31) | 163 (49) | 258 (78) | 411 (125) |
| | 80 | 35 (10) | 56 (17) | 89 (27) | 142 (43) | 226 (68) | 360 (109) |
| | 90 | 31 (9) | 50 (15) | 79 (24) | 126 (38) | 201 (61) | 320 (97) |
| | 100 | 28 (8) | 45 (13) | 71 (21) | 114 (34) | 181 (55) | 288 (87) |
| | 110 | 25 (7) | 41 (12) | 65 (19) | 103 (31) | 164 (49) | 261 (79) |
| | 120 | 23 (7) | 37 (11) | 59 (17) | 95 (28) | 150 (45) | 240 (73) |
| | 130 | 21 (6) | 34 (10) | 55 (16) | 87 (26) | 139 (42) | 221 (67) |
| | 140 | 20 (6) | 32 (9) | 51 (15) | 81 (24) | 129 (39) | 205 (62) |
| | 150 | 18 (5) | 30 (9) | 47 (14) | 76 (23) | 120 (36) | 192 (58) |
| | 160 | 17 (5) | 28 (8) | 44 (13) | 71 (21) | 113 (34) | 180 (54) |
| | 170 | 16 (4) | 26 (7) | 42 (12) | 67 (20) | 106 (32) | 169 (51) |
| | 180 | 15 (4) | 25 (7) | 39 (11) | 63 (19) | 100 (30) | 160 (48) |
| | 190 | 14 (4) | 23 (7) | 37 (11) | 60 (18) | 95 (28) | 151 (46) |
| | 200 | 14 (4) | 22 (6) | 35 (10) | 57 (17) | 90 (27) | 144 (43) |
| | | | | | | Maximum distance from transformer to load | |

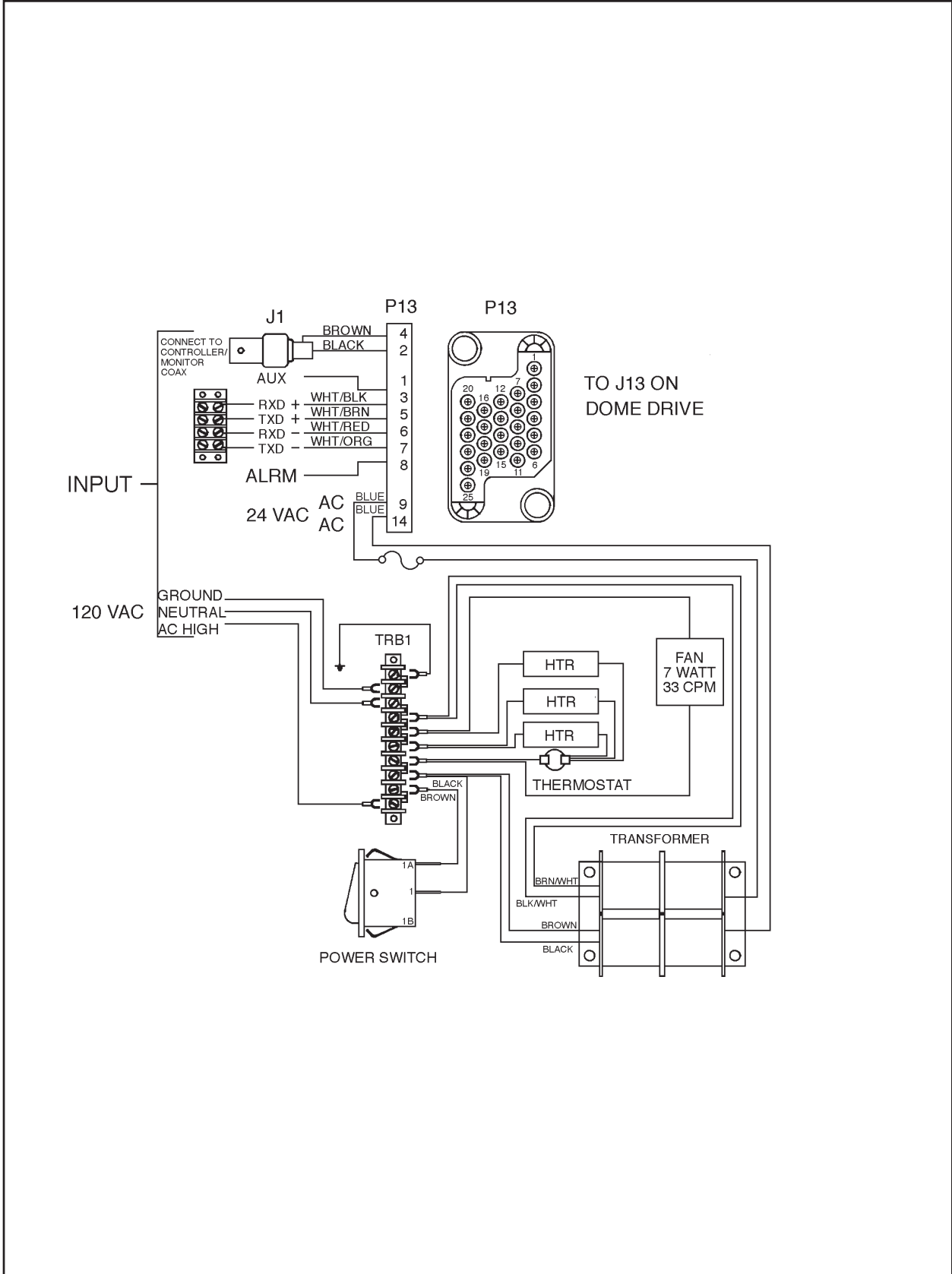


Figure 3. 24 VAC Back Box Wiring Diagram (for Dome Drives with Integral Receiver/Driver)

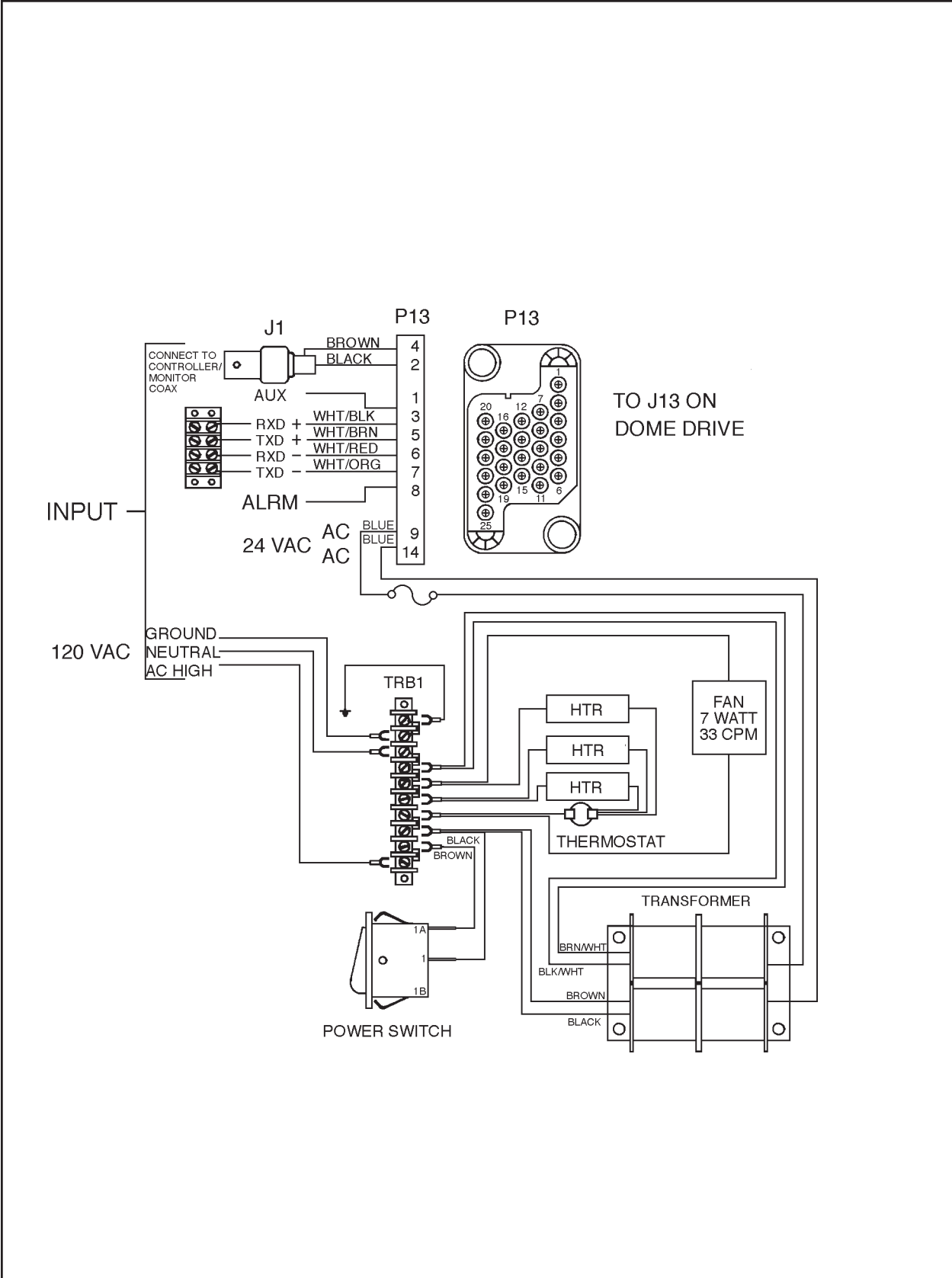


Figure 4. 120 VAC Back Box Wiring Diagram (for Dome Drives with Integral Receiver/Driver)

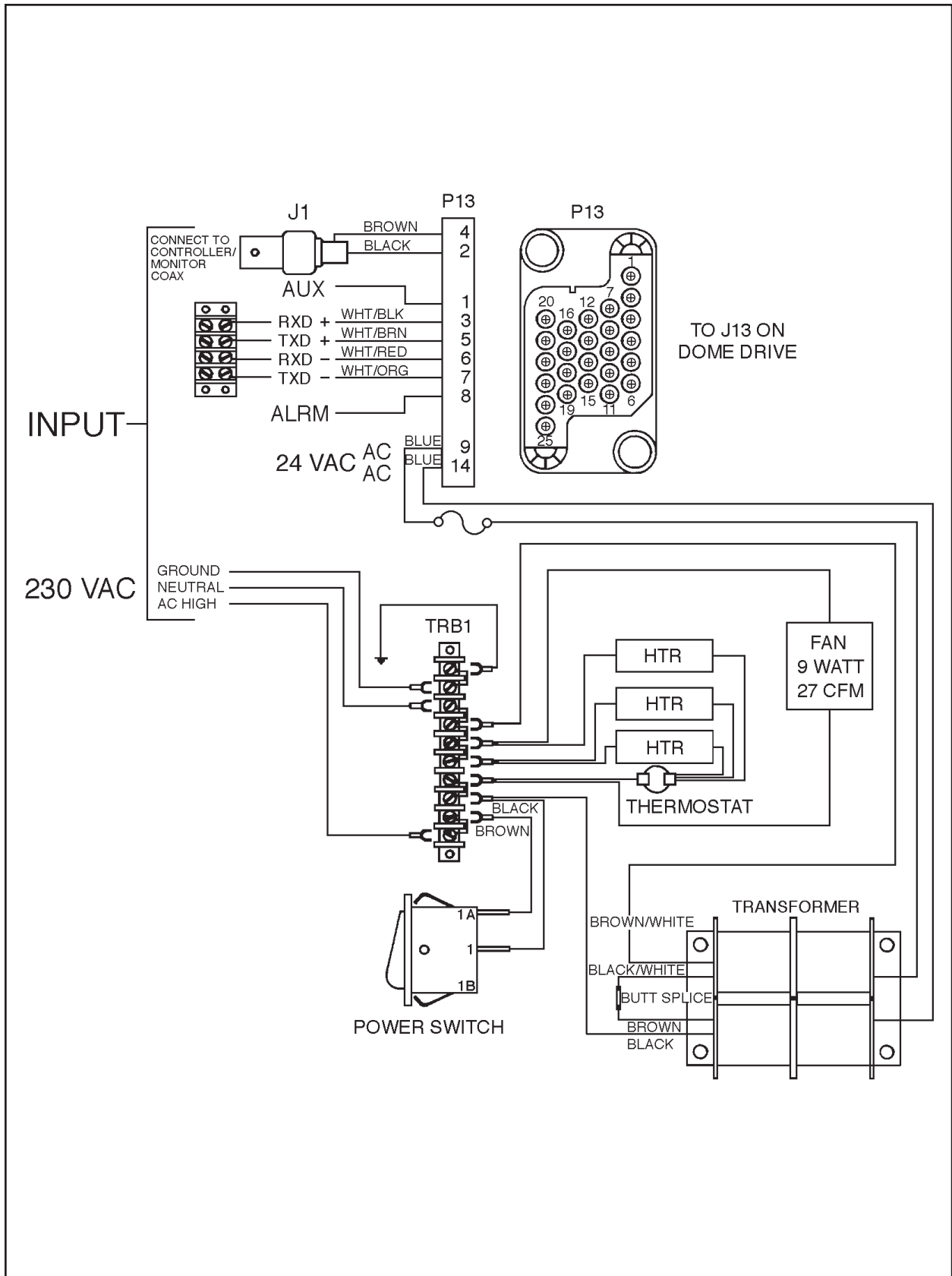


Figure 5. 230 VAC Back Box Wiring Diagram (for Dome Drives with Integral Receiver/Driver)

3.2.2 Hard-Wire or Remote Receiver/Driver

Refer to Figures 6 and 7 for wiring diagrams.

Refer to Table A for the type of video coaxial cable to use.

On models for suspended ceilings or hard ceilings, a plate is provided on the top of the back box with 1/2" and 3/4" conduit knockouts.

If your back box has a power switch, make sure it is off before wiring power to the back box.

A minimum of eleven (11) conductors plus coax are required for pan/tilt, motorized zoom lens and camera power. Dome drives with presets (PP) require an additional six (6) conductors for Type D or seven (7) conductors for Type E. The above does not include the conductor requirements for heaters/blower which will need an additional two (2) plus ground.

The following cable distances are approximate and does not account for heaters/blower.

Calculations are based on a 10% cable loss with both motors running.

| Dome Drive | Model Type | |
|------------|-----------------------------|------------------|
| Type B & C | Non-Preset Models | |
| | 11 Conductors | 12 Conductors* |
| Type D | Preset Non-SL Models | |
| | 17 Conductors | 18 Conductors* |
| Type E | Preset SL Models | |
| | 18 Conductors | 19 Conductors* |
| 20 Awg | 153 ft (46.6 m) | 281 ft (85.6 m) |
| 18 Awg | 244 ft (74.3 m) | 447 ft (136.2 m) |
| 16 Awg | 387 ft (117.9 m) | 710 ft (216.4 m) |

* Using 2-conductor common.

A relay box (RB24) for use with a hardwire control only is available to extend the operating distance (control to relay box) up to 15,000 ft over 18 Awg wire.

The following cable sizes are the minimum recommended for use with the heaters/blower kit at the wattage and voltage listed.

122 watts @ 24 VAC

20 Awg 23 ft (7 m)
 18 Awg 37 ft (11.2 m)
 16 Awg 58 ft (17.6 m)

127 watts @ 120 VAC

20 Awg 558 ft (170 m)
 18 Awg 888 ft (270.6 m)
 16 Awg 1,410 ft (429.7 m)

129 watts @ 230 VAC

20 Awg 2,020 ft (615.7 m)
 18 Awg 3,213 ft (979.3 m)
 16 Awg 5,100 ft (1,554.4 m)

Proceed to Section 3.3, DOME DRIVE INSTALLATION.

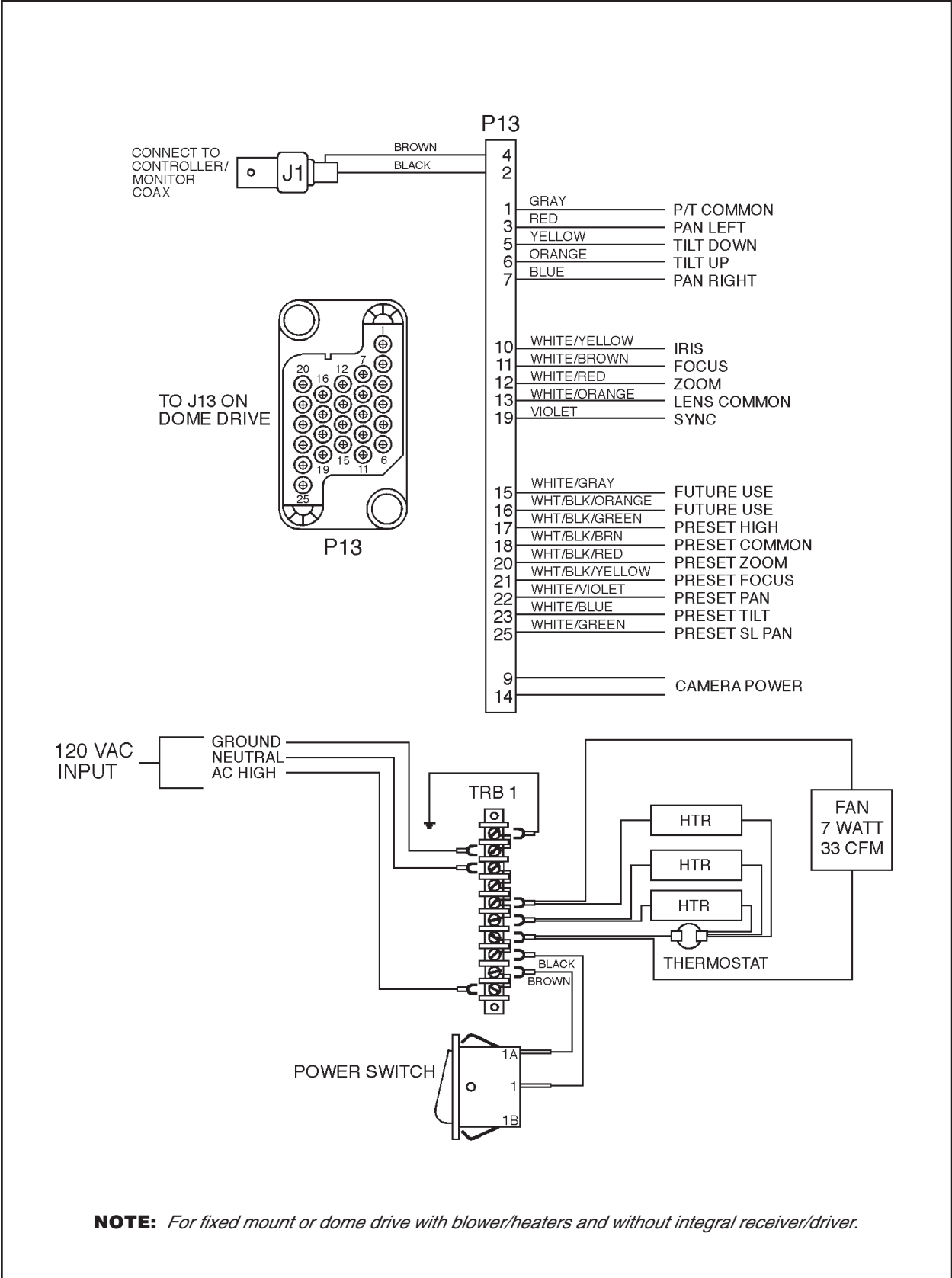
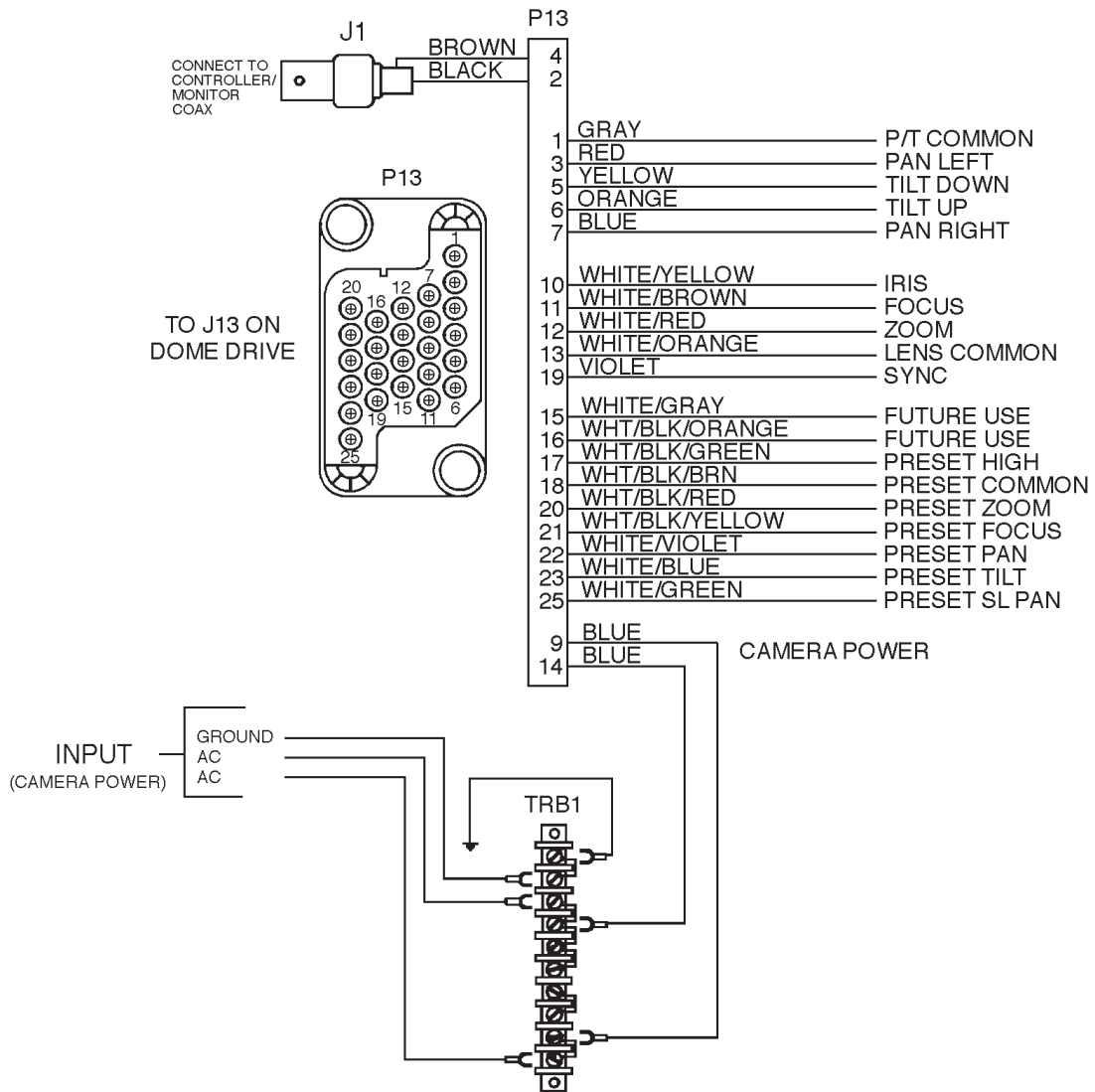


Figure 6. Wiring Diagram, Hard-Wire Control with Heater



NOTE: For use in domes without integral receiver/driver or heaters and blower.

Figure 7. Wiring Diagram, Hard-Wire Control without Heater

3.2.3 Heater/Blower Kit Field Installation

The kits are shipped partially assembled, to complete assembly and to install the heater/blower kit perform the following steps:

1. Place the fan over the four (4) unused internally threaded standoffs located on the back plate (refer to Figure 11). Note the arrow indicating the air flow direction of the fan, installing with arrow pointing "away" from back plate.
2. Place the heater assembly over the fan aligning the four (4) holes in the plate with the holes in the fan and the standoffs.
3. Install the four (4) #6 lock washers and screws through the plate and the fan threading the screws into the standoffs.
4. Mounting through one hole of the thermostat mounting tab, attach the thermostat to the standoff of the terminal block on the end nearest the fan using the 6-32 x 3/8" screw (see Figure 11).
5. Connect the terminated wires to the terminal block as shown in Figures 3 through 6 depending on back box configuration.

3.3 DOME DRIVE INSTALLATION

Back box installation is now complete. Proceed with the installation of the dome drive or fixed mount unit. Refer to the manual provided with the dome drive or fixed mount for further installation instructions.

4.0 EXPLODED ASSEMBLY DIAGRAMS

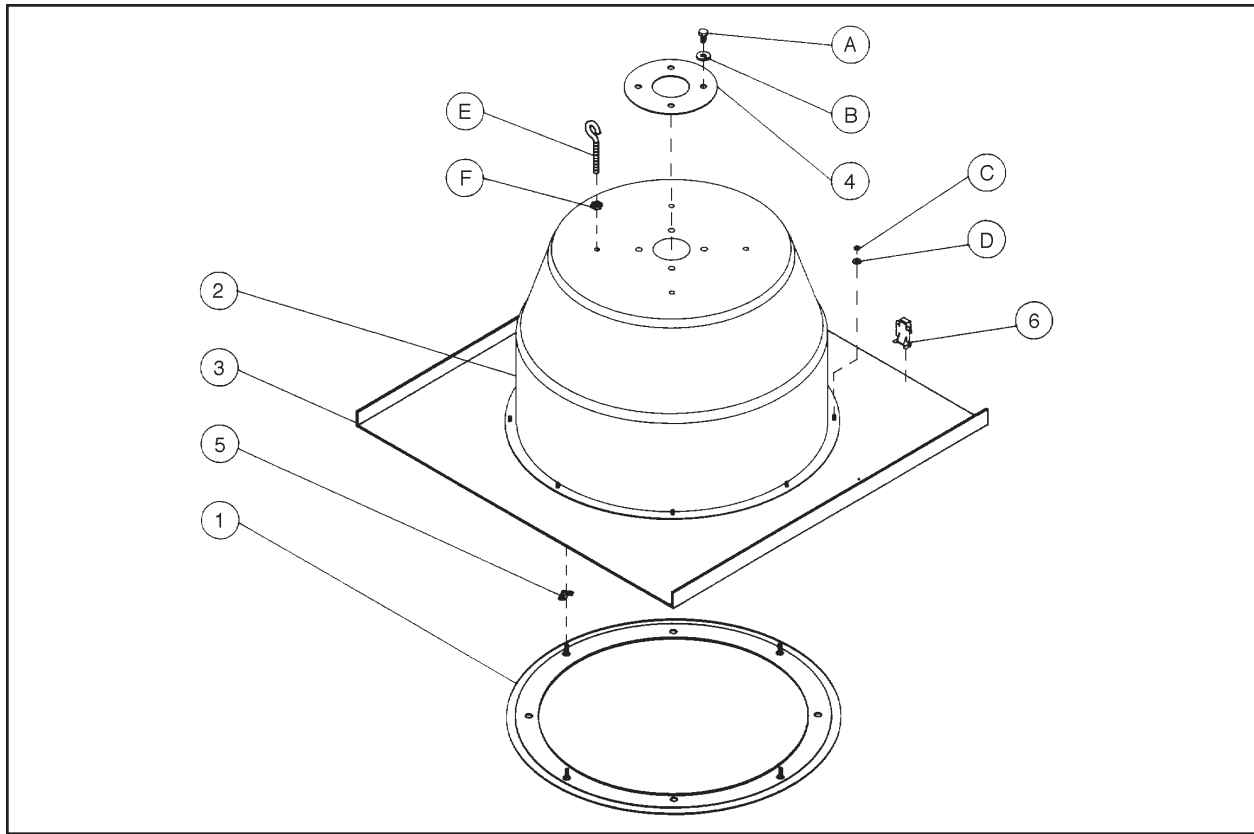


Figure 8. Suspended Ceiling Back Box Exploded Assembly Diagram

Table C. Suspended Ceiling Back Box Exploded Assembly Parts List

| Item | Quantity | Description | Part Number |
|------|----------|--|-----------------|
| 1 | 1 | Trim ring, white | SB262ASSY |
| 2 | 1 | Back box | 8144287COMP |
| 3 | 1 | Faceplate, drop ceiling, white | 8144169COMP |
| 4 | 1 | Plate, gland | 8004130COMP |
| 5 | 4 | Receiver, ball stud | PT180410001 |
| 6 | 4 | Clip, T-rail retaining | 80010008 |
| | 1 | Switch, rocker, on/off, SPST (not shown) | SWI0201S11N41P |
| | 1 | Acrylic dome, clear (not shown) | 81410001-5 |
| | | Acrylic dome, smoked (not shown) | 81410001-4 |
| | 1 | Dome gasket (not shown) | 94510031 |
| A | 4 | Screw, 1/4-20 x 3/8", pan head, Phillips | ZH1/420X.375SPP |
| B | 4 | Washer, split lock, 1/4" | ZH1/4LWSSL |
| C | 8 | Nut, 6-32 | ZH6-32NUTSH |
| D | 8 | Washer, internal star, #6 | ZH6LWSIS |
| E | 2 | Bolt, eye, 1/4-20 x 2" full thread | ZH1/4-20X2.0EYE |
| F | 2 | Nut, 1/4-20 | ZH1/4-20NUTCH |

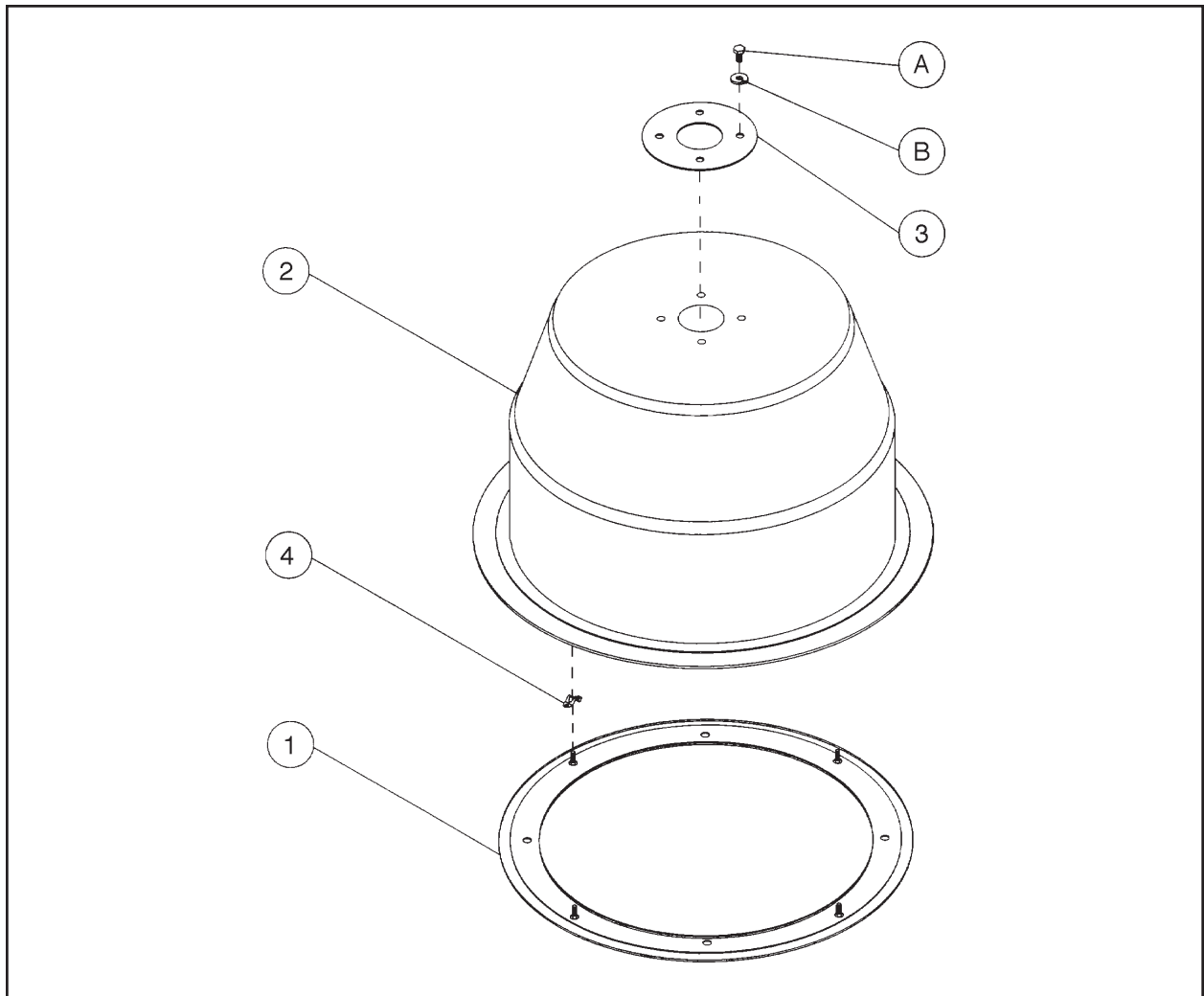


Figure 9. Hard Ceiling Back Box Exploded Assembly Diagram

Table D. Hard Ceiling Back Box Exploded Assembly Parts List

| Item | Quantity | Description | Part Number |
|------|----------|---|-----------------|
| 1 | 1 | Trim ring, white | SB262ASSY |
| 2 | 1 | Back box | 8141202WA |
| 3 | 1 | Plate, gland | 8004130COMP |
| 4 | 4 | Receiver ball stud | PT180410001 |
| | 1 | Switch, on/off, SPST (not shown) | SWI0201S11N41P |
| | 1 | Backup plate, optional (not shown) | 8004110COMP |
| | 1 | Acrylic dome, clear (not shown) | 81410001-5 |
| | 1 | Acrylic dome, smoked (not shown) | 81410001-4 |
| | 1 | Dome gasket (not shown) | 94510031 |
| A | 4 | Screw, 1/4-20 x 3/8", Phillips pan head | ZH1/420X.375SPP |
| B | 4 | Washer, split lock, 1/4" | ZH1/4LWSSL |
| | 1 | Backup plate, optional (not shown) | 8004110COMP |
| | 4 | Screw, 6-32 x 2", Phillips pan head (not shown) | ZH6-32X2.00SPP |

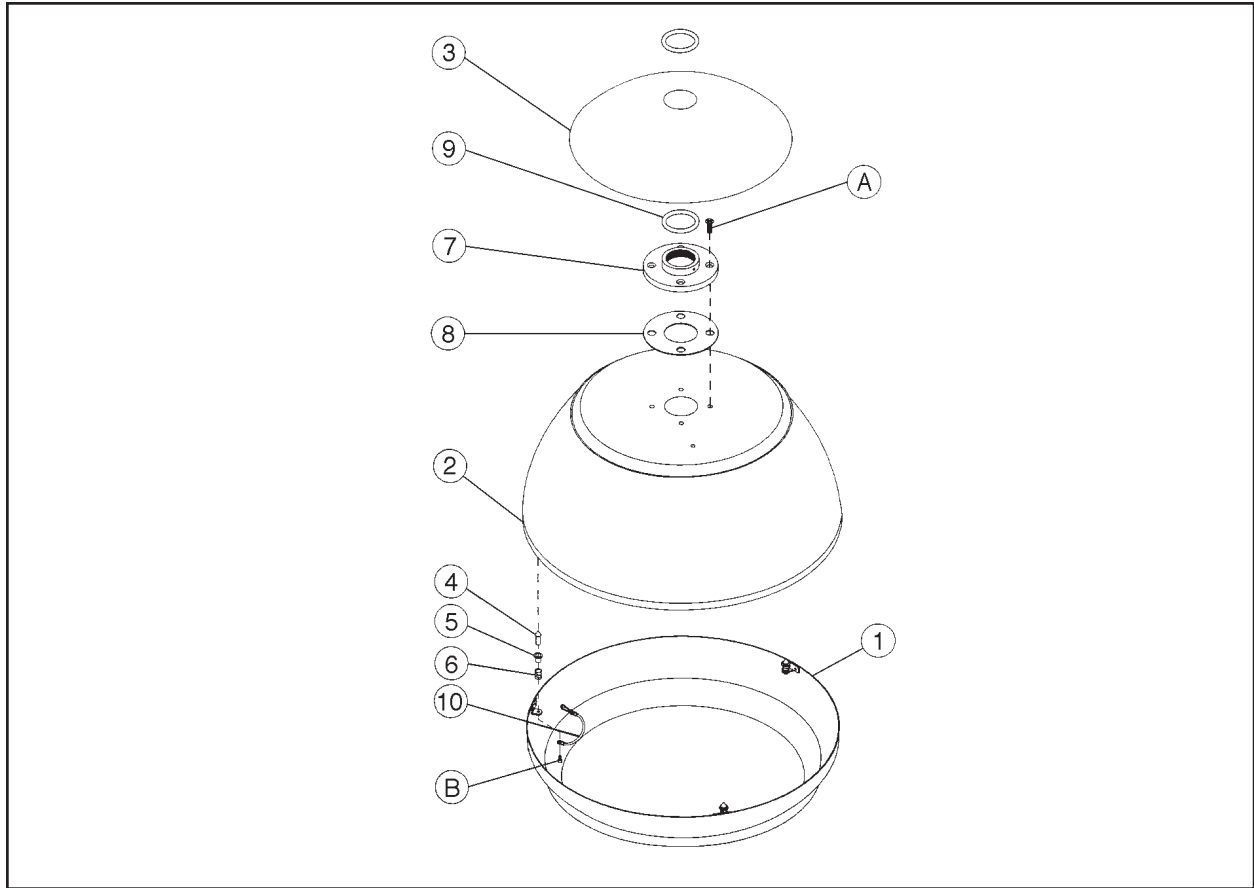


Figure 10. Pendant Back Box Exploded Assembly Diagram

Table E. Pendant Back Box Exploded Assembly Part List

| Item | Quantity | Description | Part Number |
|------|----------|---|-----------------|
| 1 | 1 | Bezel, black | 8144190BCOMP |
| | | Bezel, gray | 8144190GCOMP |
| 2 | 1 | Back box, pendant, black | 8144185BCOMP |
| | | Back box, pendant, gray | 8144185GCOMP |
| 3 | 1 | Cap, pendant, 14", black | 8144984COMP |
| | | Cap, pendant, gray | 8144884COMP |
| 4 | 3 | Pin, bezel attachment | 8004053COMP |
| 5 | 3 | Spacer, flanged, nylon, 1/4" CLR x 7/16"L | SPA3109 |
| 6 | 3 | Spring, compression | SPRG10000 |
| 7 | 1 | Flange, 1-1/2" NPT | MRCA4000COMP |
| 8 | 1 | Gasket (outdoor models only) | 80010198 |
| 9 | 2 | O-ring (outdoor models only) | 80010010 |
| 10 | 1 | Cable, safety | E7081002COMP |
| 11 | 1 | Switch, on/off, SPST (not shown) | SWI0201S11N41P |
| | 1 | Acrylic dome, clear (not shown) | 81410001-5 |
| | 1 | Acrylic dome, smoked (not shown) | 81410001-4 |
| | 1 | Dome gasket (not shown) | 94510031 |
| | 1 | Back box gasket (not shown) | EH450010000 |
| A | 4 | Screw 1/4-20 x 5/8" flat hd phil, M/S, SS | ZH1/420X.625SFS |
| B | 3 | Screw 6-32 x 1/4" hex soc hd C/S, SS | ZH6-32X.250SS |

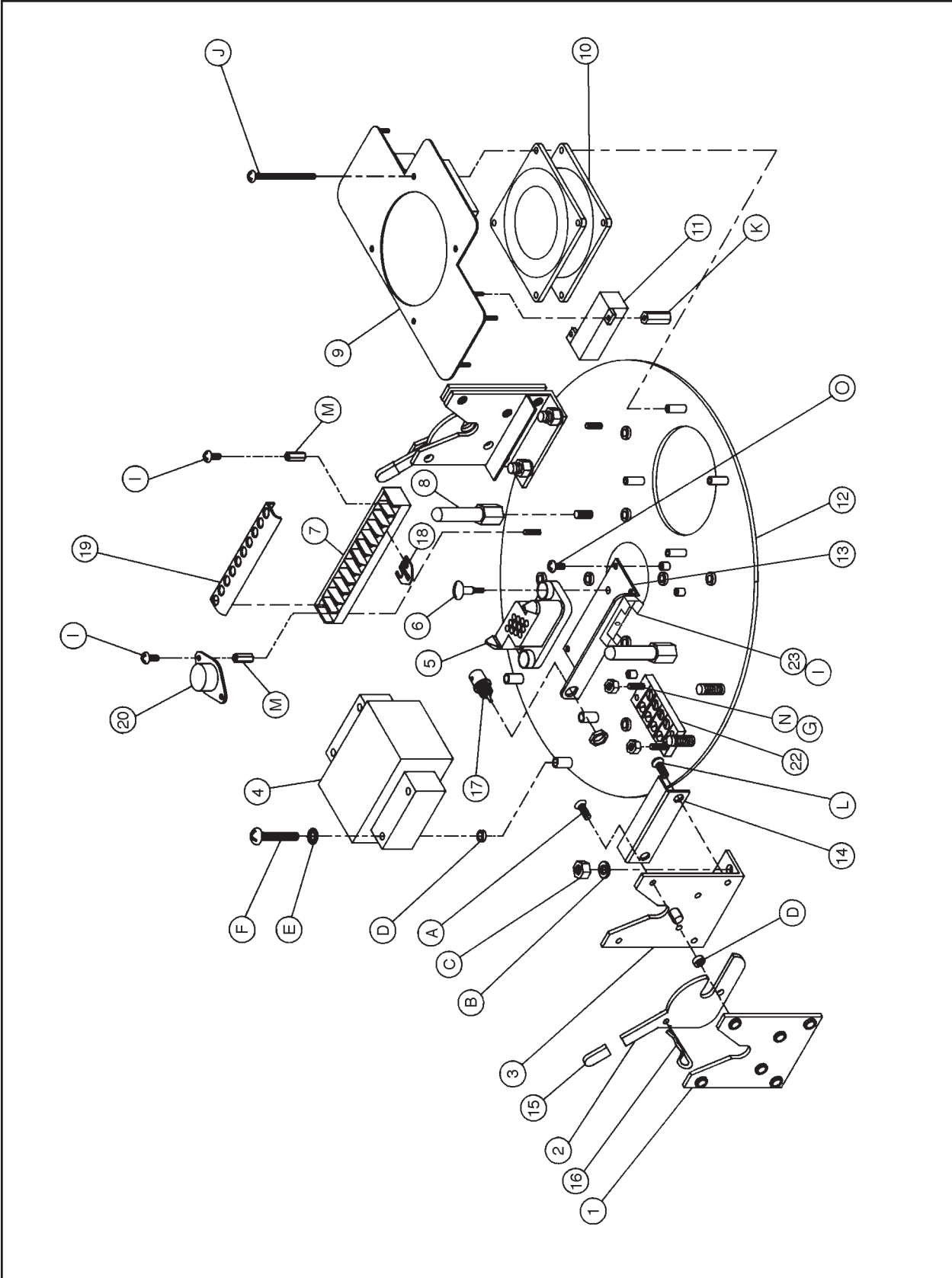


Figure 11. Back Plate Exploded Assembly Diagram

Table F. Back Plate Exploded Assembly Parts List (Figure 11)

| Item | Quantity | Description | Part Number |
|------|----------|---|-----------------|
| 1 | 2 | Latch backup plate | 8004244COMP |
| 2 | 2 | Latch | 8004105COMP |
| 3 | 2 | Latch bracket | 8004143COMP |
| 4 | 1 | Transformer (120 VAC model only) | TRF21243.30.70F |
| 5 | 1 | 25-position connector plug | CON10P025Z41T |
| 6 | 2 | Screw, 6-32 | ZH208211-4 |
| 7 | 1 | 10-position terminal block | TRB6TBV-10-OE |
| 8 | 2 | Alignment pin | 8004402COMP |
| 9 | 1 | Heater/fan mounting bracket | 8004118COMP |
| 10 | 1 | Fan, 120 VAC | EH4600115W3 |
| 11 | 3 | Heater, 120 VAC | HTR50120 |
| 12 | 1 | Back plate | 8004190COMP |
| 13 | 1 | Connector mounting bracket | 8004046COMP |
| 14 | 2 | Stabilizer bracket | 8004047COMP |
| 15 | 2 | Boot | 80010007 |
| 16 | 2 | Hairpin clip | ZH1/4CLIPSS |
| 17 | 1 | Connector, BNC jack, insulated | CON01J002Z41S |
| 18 | 6 | 2-position jumper | TRBJ6-2 |
| 19 | 1 | 10-position terminal block cover | TRBTC6-10-PFH |
| 20 | 1 | Thermostat (units with heaters and blower) | EH5510049A |
| 22 | 1 | 4-position terminal block | TRB4-140 |
| 23 | 1 | Fuse holder | FUS357001 |
| | 1 | Fuse, 2A 3AG (not shown) | FUS2 |
| | 1 | Capacitor, .47 μ F, 12 V (not shown) | CAPE474P012MAY |
| | 1 | Capacitor, 220 μ F, 100 V (not shown) | CAPF221P100JRN |
| | 1 | Capacitor, 270 μ F, 100 V (not shown) | CAPF271P100JRN |
| A | 4 | Screw, 10-32 x 1/2" flat head, Phillips | ZH10-32X.500CFS |
| B | 4 | Split lock washer, 1/4" | ZH1/4LWSSL |
| C | 4 | Nut, 1/4-20 | ZH1/4-20NUTCH |
| D | 10 | Spacer .312 OD x 1/8" long, #10 | SPA8540 |
| E | 2 | Internal star washer, #10 | ZH10LWSIS |
| F | 2 | Screw, 10-32 x 1" pan head, Phillips | ZH10-32X1.00SPP |
| G | 2 | Nut, 6-32 | ZH6-32NUTSH |
| I | 2 | Screw, 6-32 x 3/8" pan head, Phillips | ZH6-32X.375SPP |
| J | 4 | Screw, 6-32 x 2" pan head, Phillips | ZH6-32X2.00SPS |
| K | 6 | Spacer, 3/16" hex by 3/4" long, 2-56 tapped | SPA9401L |
| L | 4 | Screw, 10-32 x 1/2" pan head, Phillips | ZH10-32X.500SPP |
| M | 2 | Spacer, 1/4" hex by 1/2" long, 6-32 tapped | SPA8423 |
| N | 2 | Screw, 6-32 x 5/8" flat head, Phillips | ZH6-32X.625SFS |
| O | 4 | Screw, 6-32 x 1/2" pan head, Phillips | ZH6-32X.500SPP |

5.0 SPECIFICATIONS

NOTE: *It is not recommended using 24 VAC in applications requiring heaters/blower because of the excessive current draw that may exceed Class 2 transformer applications.*

ELECTRICAL

Enclosure Back Box

Input Voltage: 24 VAC or 120 VAC

Power Requirements

Receiver/Driver: 48 vA for 24 VAC and 120 VAC dome drives

Blower

continuous duty: One (1) at 30 cfm, 1.92 watts, 24 VDC

One (1) at 33 cfm, 6.7 watts, 120 VAC 60 Hz

One (1) at 27 cfm, 8.9 watts 230 VAC 50 Hz

Heaters

24 VAC: 120 watts total

120 VAC: 135 watts total

230 VAC: 105 watts total

Thermostatically controlled; activates ON at 40°F (4.4°C) and OFF at 60°F (15.56°C)

Power cord: Not supplied; use 3-wire grounded, 18 Awg minimum for 120 or 230 VAC supply input

Power cable: Not supplied: must conform to local and national electrical codes

GENERAL

Enclosure

Environment: Indoor or outdoor (depending on model ordered)

Dimensions: See Figures 12 and 13

Construction

Back box: Aluminum

Cap: Aluminum

Bezel: Aluminum

Trim Ring: ABS/aluminum

Finish: The following are standard colors; consult factory for optional colors

Outdoor

Pendant Light gray

Indoor

Suspended/
Hard Ceiling White (back box) and eggshell white (faceplate, trim ring and bezel)

Pendant Black

Temperature Range

Indoor models: 32° to 120°F (0° to 48.89°C)

Outdoor models: -10° to 120°F (-23.33° to 48.89°C)

(Design and product specifications subject to change without notice.)

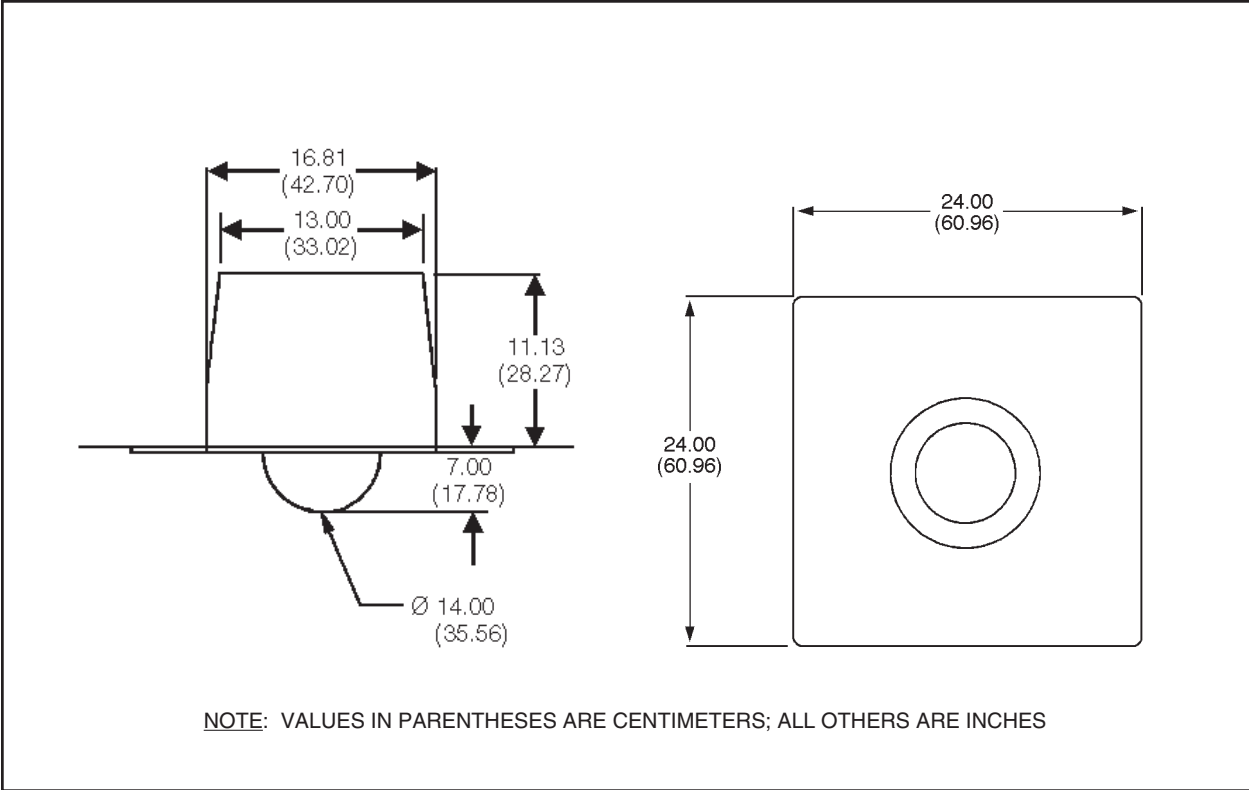


Figure 12. Suspended/Hard Ceiling Dimension Drawings

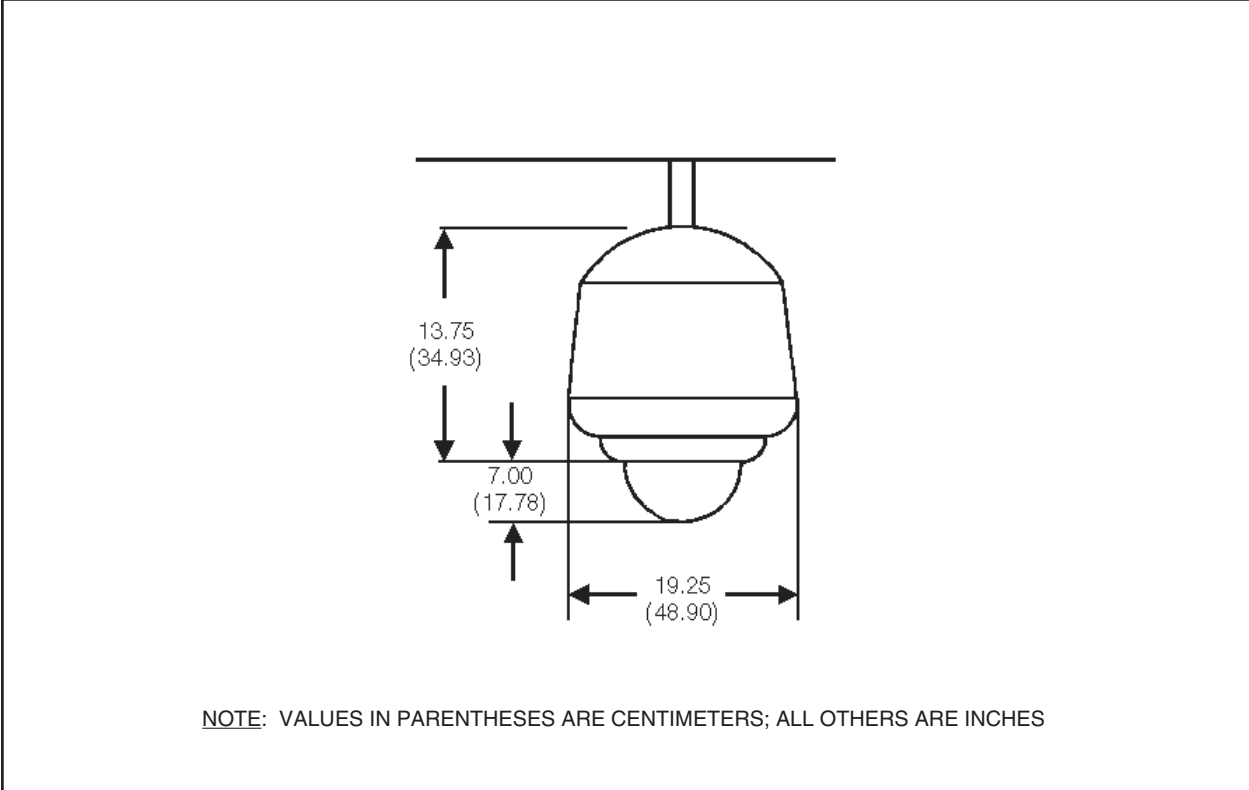


Figure 13. Pendant-Mount Dimension Drawing

6.0 WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department
Pelco
3500 Pelco Way
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco
3500 Pelco Way
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors
473 Eccles Avenue
South San Francisco, CA 94080 USA
Phone: 650-737-1700
Fax: 650-737-0933

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This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.